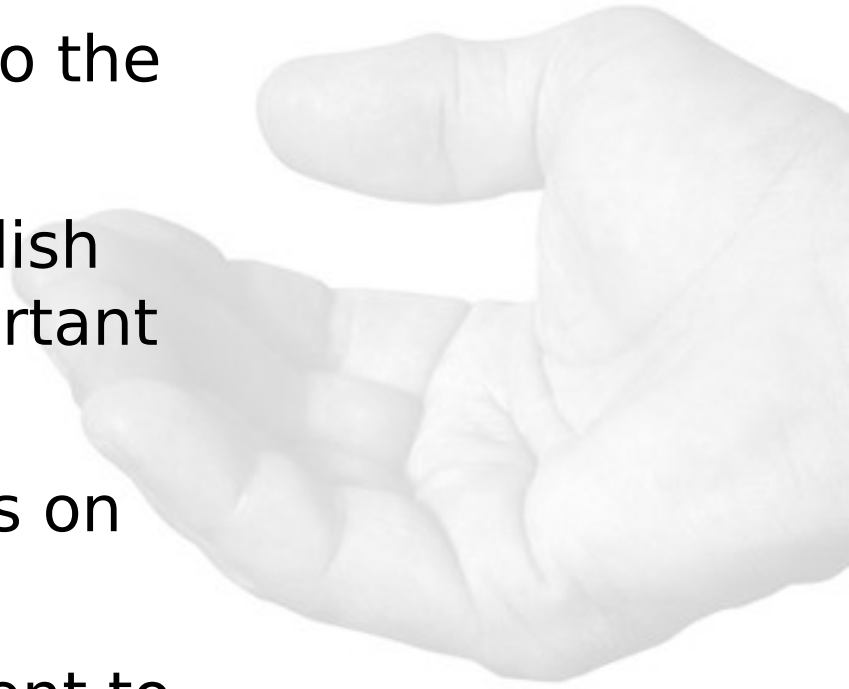
Developing Tools for Project Managers to Make Environmental Considerations in the Systems Acquisition Process

Joakim Tornéus
Swedish Defence Materiel Administration (FMV)
Stockholm, Sweden

Independent

FMV

- is an independent, civilian authority reporting directly to the Government
- primarily works for the Swedish Armed Forces, its most important customer
- also undertakes assignments on behalf of other authorities
- is assigned by the Government to handle export support



Business concept

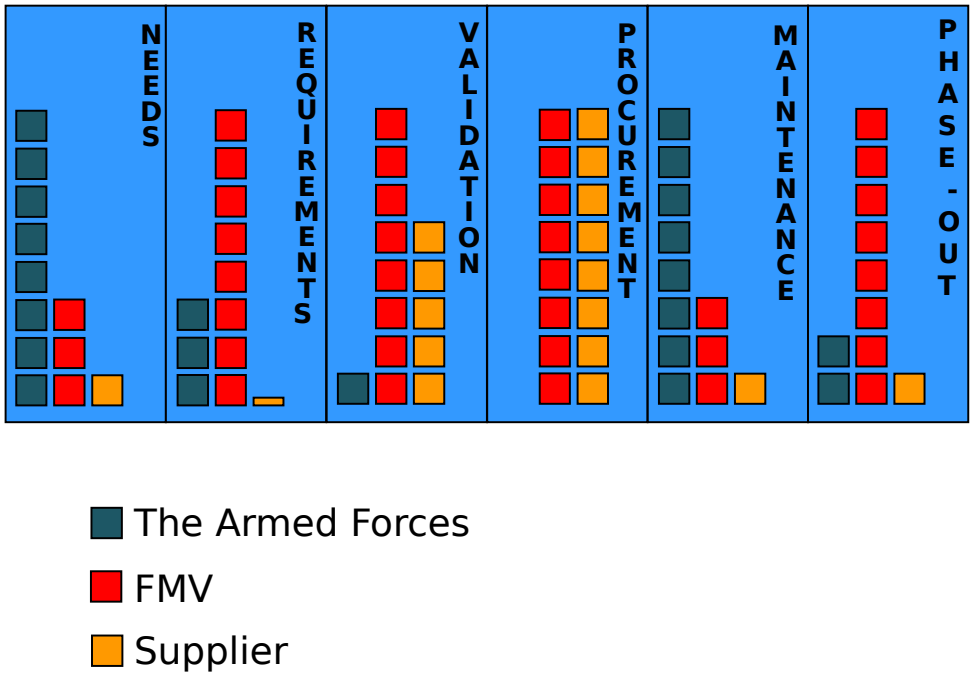
"FMV is to contribute through cost-effective, business-like and reliable supply of materiel to strengthening the operational capability of the Swedish Armed Forces."

Technology for Sweden's Security

FMV

- controls the design and procurement of new materiel
- develops materiel and systems for the defence of the future
- takes technical responsibility for the materiel throughout its lifetime
- creates scope for renewal by phasing out obsolete materiel

FMV has a variety of assignments



Tools for greening the acquisition

- FMV's Environmental Guidelines in the Acquisition Process
- The Swedish Defence' Criteria For Chemical Substances
- Chemical Products database

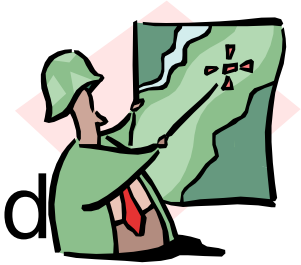
FMV's Environmental Guidelines in the Acquisition Process

Why?

- Driving forces
- Environmental impact
- EMS
  - Environmental impact
  - Environmental policy
  - Environmental objectives

Driving Forces

Customers demand



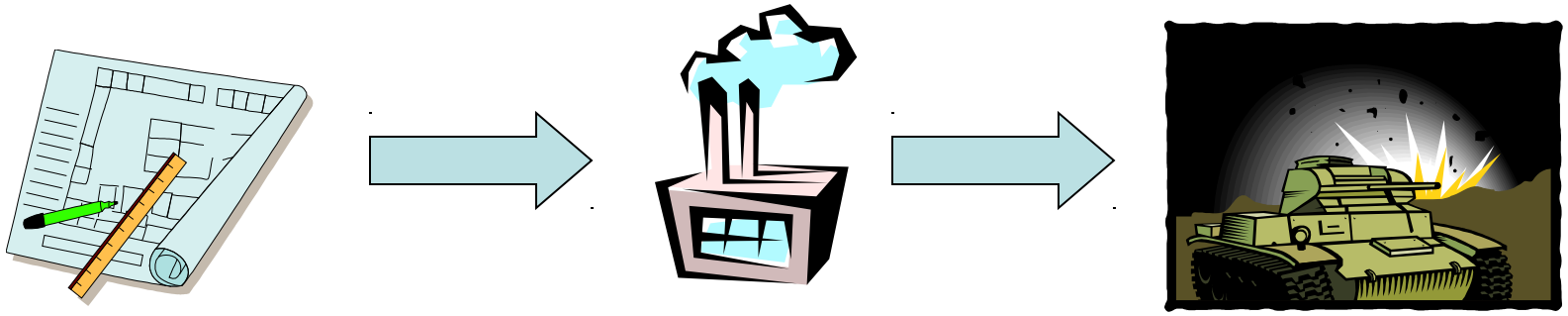
The Owner´s demand

Legal demands

Goodwill

Environmental Impact

FMV have identified the systems acquisition process as the activity with the greatest environmental impact

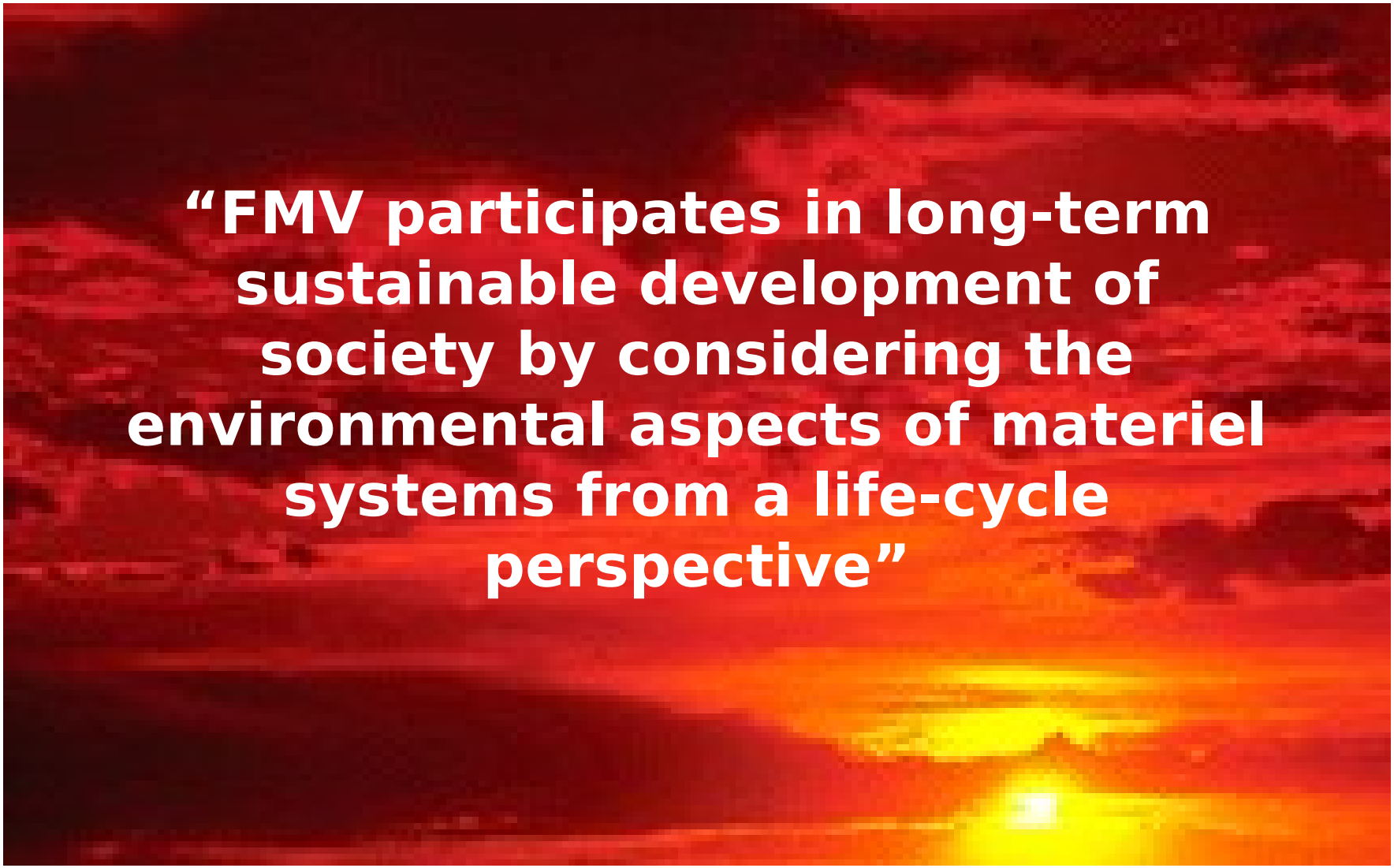


FMV Environmental Management System

Integrated Management System based on:

- ISO 14001
- ISO 9001:2000
- ISO 15288
- OHS
- Rules of Military Aviation

Environmental Policy


“FMV participates in long-term sustainable development of society by considering the environmental aspects of materiel systems from a life-cycle perspective”

Environmental Objectives

FMV shall have a quality assured, environmental sound and process oriented workflow.

Indicators:

- A minimum of 50% of all acquisitions shall contain environmental requirements
- A minimum of 50% materiel systems lifecycle management plans shall have approved environmental plans
- Approved environmental plans in the materiel tests shall increase during 2004

FMV's Environmental Guidelines in the Acquisition Process

What we knew:

- Project managers have basic environmental knowledge
- Variable quality of our environmental requirements
- Environmental requirements not always on level with the systems environmental impact

FMV's Environmental Guidelines in the Acquisition Process

What we wanted:

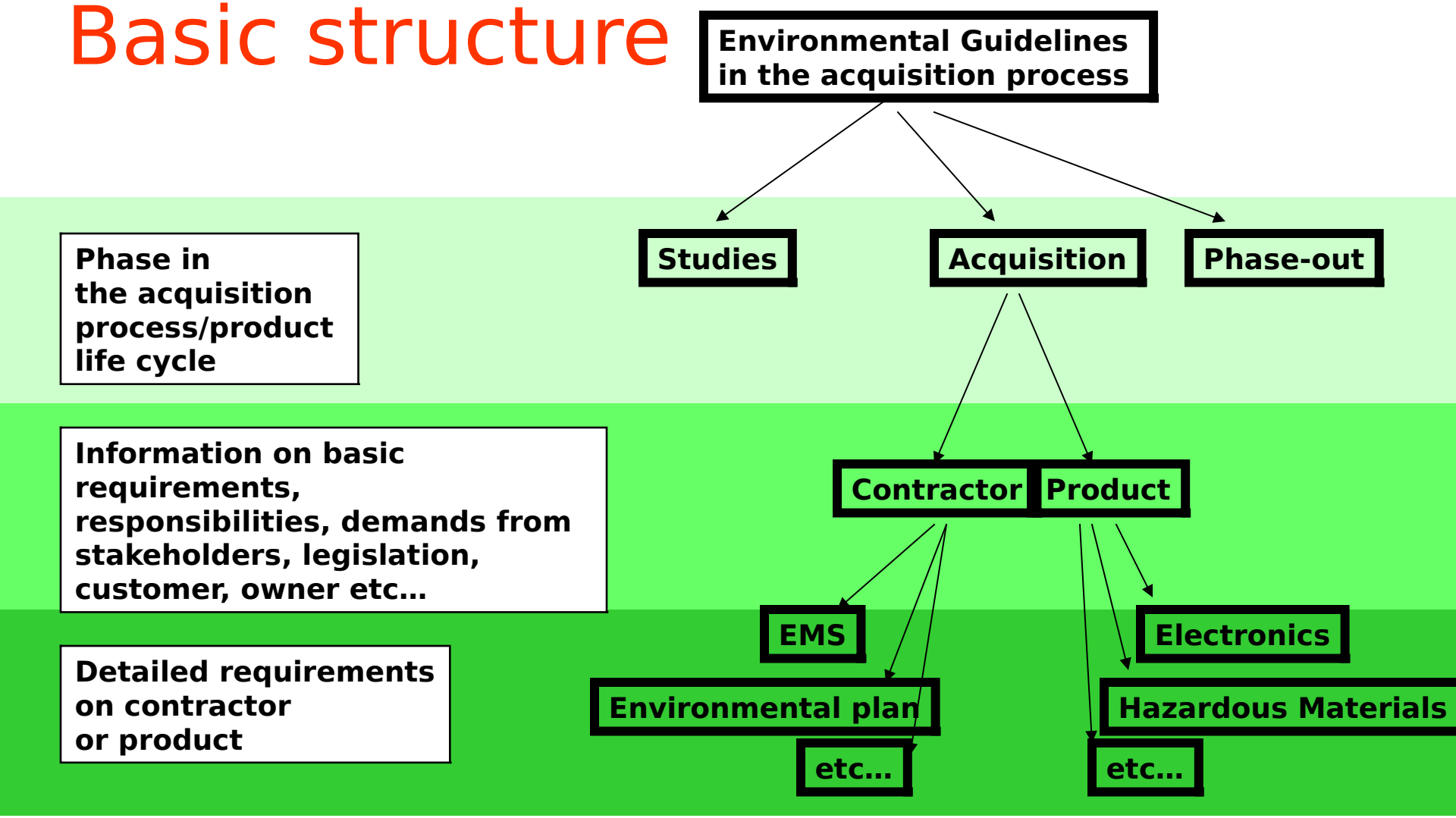
- Cover all phases in the acquisition process
- Increase the quality of environmental requirements
- An integrated part of the management system
- Easy to access and to use
- Information on legal demands and other applicable demands
- Examples of texts to use in request for proposals and contracts

FMV's Environmental Guidelines in the Acquisition Process

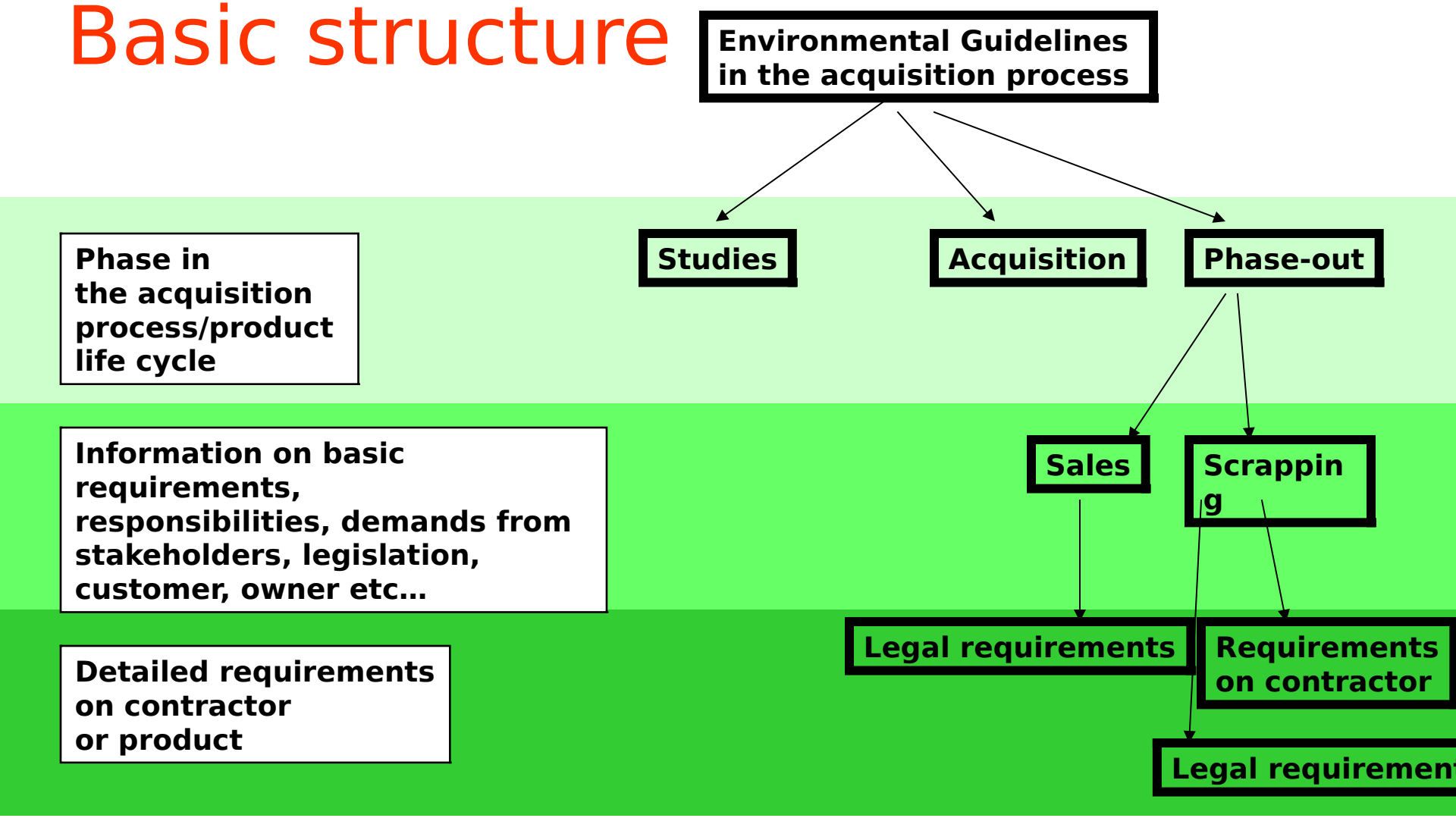
Result so far:

- The tool easily accessible on the Intranet
- Three phases covered:
  - Studies (generating and evaluating concepts)
  - Acquisition
  - Phasing out and disposal
- Information on legislation and other demands
- Continuously updated and improved

Basic structure



Basic structure



Environmental Requirements

Requirements on the contractor

(Statement of Work)

- Environmental management system
- Environmental plan
- EMS auditing

Environmental Requirements

Requirements on the product

(Specification of Technical Requirements)

- Hazardous materials
  - Batteries
  - Electronics
  - Construction materials
  - Chemicals
- Energy consumption
- Emissions
- Design for demil

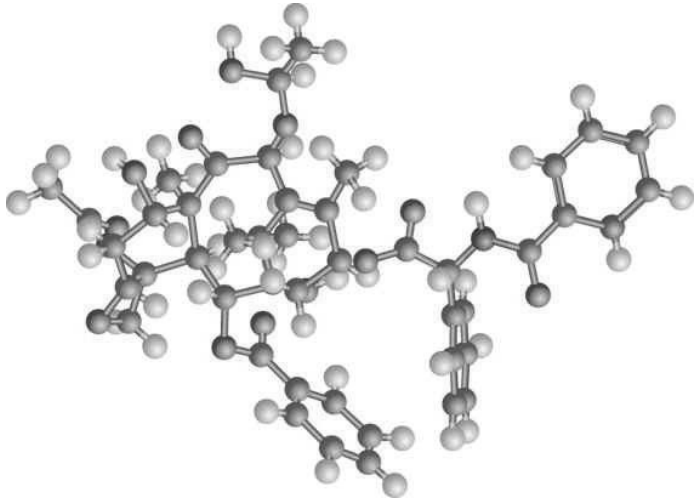
FMV's Environmental Guidelines in the Acquisition Process

Still to be done:

- Develop the tool for the Operational and Maintenance phases
- More concrete examples of texts to use
- Proceed with the integration with the Management System

The Criteria For Chemical Substances

- General FMV policy
- Three parts:
  1. Evaluation criteria according to classification
  2. Substances prohibited by law
  3. Undesirable substances
- Sorted according to application
- Hazardous substances in materials
- Substances that will be banned/restricted in the future



The Criteria For Chemical Substances

The general policy:

As far as possible all materiel supplied to FMV shall be free from substances that are very toxic, carcinogenic, allergenic, environmentally hazardous, affect genetic material, reproduction, the climate and the ozone layer

Chemical Products Database

- Chemical management tool
- Consists of Material Safety Data Sheets (MSDS) for chemical products used in the Swedish Armed Forces
- Approximately 1700 MSDS
- Benefits:
  - Overview over chemicals used
  - Tool for substitution
  - Statistics

Summary

- The Environmental Guidelines in the Acquisition Process
  - Important tool in greening our acquisition process
  - Will make it easier to fulfil our environmental objectives
  - Continuously improved in cooperation with the project managers

Questions?

joakim.thorneus@fmv.se

+46 8 782 43 03

jari.hiltula@fmv.se

+46 8 782 65 34